

HOUSE No. 1362

By Mr. Connolly of Everett, petition of Edward G. Connolly and others for legislation to reduce the impact of mercury on the environment caused by vehicle components. Environment, Natural Resources and Agriculture.

The Commonwealth of Massachusetts

PETITION OF:

Edward G. Connolly J. James Marzilli, Jr.
Paul J. Donato

In the Year Two Thousand and Five.

AN ACT TO ACHIEVE REDUCTIONS IN ENVIRONMENTAL MERCURY THROUGH THE COLLECTION AND REMOVAL OF VEHICLE MERCURY SWITCHES, MERCURY SENSORS, AND OTHER MERCURY-ADDED COMPONENTS FROM VEHICLES IN COMMERCE IN THE COMMONWEALTH OF MASSACHUSETTS BY VEHICLE MANUFACTURERS, AND BY IMPLEMENTING A DESIGN FOR RECYCLING PROGRAM FOR FUTURE VEHICLES TO PROHIBIT THE USE OF MERCURY OR MERCURY-ADDED COMPONENTS, AND FOR OTHER PURPOSES.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

2 (a) SHORT TITLE. — This Act may be cited as the “Mercury-
3 Free Vehicle Act of 2003.”

4 (b) TABLE OF CONTENTS. — The table of contents of this
5 Act is as follows:

1 SECTION 2. FINDINGS AND DECLARATIONS.

2 (a) The legislature finds that:

3 (1) Mercury is a persistent and toxic pollutant that bioaccumu-
4 lates in the environment.

5 (2) Forty-one (41) states including Massachusetts have issued
6 fish advisories that warn certain individuals to restrict or avoid
7 consuming fish from bodies of water contaminated with mercury.

8 (3) The U.S. Food and Drug Administration has advised preg-
9 nant women and women of childbearing age who may become
10 pregnant not to eat shark, swordfish, king mackerel, and tilefish
11 due to methyl mercury contamination.

12 (4) According to National Research Council estimates, over
13 60,000 babies are born annually at risk for adverse neurodevelop-
14 mental effects from in utero exposure to methylmercury resulting
15 from the consumption of mercury contaminated fish.

16 These children will have to struggle to keep up in school and
17 might require remedial classes or special education.

18 (5) Recent findings show historic and current use of mercury in
19 automobiles can cause the release of as much as 10 tons of mer-
20 cury to the environment each year. Based on the automobile
21 industry's own data, there is an estimated 150-200 tons of mer-
22 cury contained in the vehicles currently on the road in North
23 America.

24 (6) Pollution prevention is the preferred strategy, more desir-
25 able than waste management and pollution control. Preventing
26 mercury or mercury-containing components from entering thermal
27 combustion units is an effective way to reduce mercury emissions
28 into the environment.

29 (7) Vehicle mercury switch collection programs are being
30 established across the country to protect human health and the
31 environment.

32 (b) The legislature declares that the purpose of this Act is to
33 reduce the quantity of mercury in the environment by:

34 (1) removing mercury from vehicles in commerce and end-of-
35 life vehicles in the Commonwealth of Massachusetts;

36 (2) creating a collection and recovery program for mercury
37 switches removed from vehicles in the Commonwealth;

38 (3) establishing a system to store the mercury collected and
39 recovered from vehicle components in the event that environmen-
40 tally appropriate management technologies are not available; and

41 (4) designing future vehicles for maximum environmental pro-
42 tection and recyclability at the end of their useful lives by imple-
43 menting a Design for Recycling program which includes phasing
44 out the use of mercury in future vehicle models.

1 SECTION 3. DEFINITIONS.

2 For the purpose of this Act:

3 (a) “Department” means the Department of Environmental
4 Protection.

5 (b) “Mercury-added component” means a component that con-
6 tains mercury and which was intentionally added to a vehicle in
7 order to provide a specific characteristic, appearance, or quality or
8 to perform a specific function, or for any other reason. Such com-
9 ponents may include, but are not limited to, switches, sensors,
10 lights, and navigational systems.

11 (c) “Manufacturer” means any person, firm, association, part-
12 nership, corporation, governmental entity, organization, combina-
13 tion, or joint venture which is the last person to produce or
14 assemble a new vehicle that utilizes mercury-added components,
15 or in the case of an imported vehicle, the importer or domestic
16 distributor of such vehicle.

17 (d) “Mercury-added switch”, a light switch or an ABS brake
18 system switch installed by an automotive manufacturer in a motor
19 vehicle.

20 (e) “Scrap recycling facility” means a fixed location, where
21 machinery and equipment are utilized for processing and manu-
22 facturing scrap metal into prepared grades and whose principal
23 product is scrap iron, scrap steel or nonferrous metallic scrap for
24 sale for remelting purposes.

25 (f) “Vehicle recycler” means any individual or entity engaged
26 in the business of acquiring, dismantling or destroying six or more
27 vehicles in a calendar year for the primary purpose of resale of
28 their parts.

29 (g) “Vehicle in commerce” means any vehicle offered for sale
30 by a dealer or registered [by state or in the United States] to be
31 operated on public roads and highways.

32 (h) “End-of-life vehicle” means any vehicle which is sold,
33 given or otherwise conveyed to a vehicle recycler or scrap recy-
34 cling facility for the purpose of recycling.

35 (i) “Capture Rate” means removal, collection, and recovery as a
36 percentage of the total mercury available from vehicles in com-
37 merce and end-of-life vehicles annually.

38 (j) “Manufacturer-Dealer Warranty Program” means an
39 arrangement between a manufacturer and its franchisee(s),

40 whereby the manufacturer agrees to reimburse the franchisee(s), at
41 established rates, for labor or parts necessary to repair a vehicle
42 pursuant to the manufacturer's original equipment warranty to the
43 original purchaser of the vehicle.

1 SECTION 4. REMOVAL, REPLACEMENT, COLLECTION,
2 AND RECOVERY OF VEHICLE MERCURY SWITCHES.

3 Within ninety (90) days of enactment of this section, every
4 manufacturer of vehicles sold within Massachusetts shall, individ-
5 ually or as part of a group, submit to the Department for review
6 and approval a plan to remove, collect, and recover mercury
7 switches.

8 (a) (1) Removal, Replacement, Collection, and Recovery
9 System. — Vehicle manufacturers shall develop and implement a
10 system to remove; replace, where possible; collect; and recover
11 mercury switches from vehicles in commerce and end-of-life vehi-
12 cles. For vehicles in commerce, the system shall provide for the
13 removal, collection, and recovery of mercury switches, and
14 replace them with mercury-free alternatives, where possible; the
15 system shall also provide for the removal, collection, and recovery
16 of mercury switches from end-of-life vehicles.

17 (2) The removal; replacement, where possible; collection; and
18 recovery system shall include, at a minimum, the following:

19 (A) an education program to inform the public and other stake-
20 holders about the purposes of the collection program and how to
21 participate in it;

22 (B) a plan for implementing and financing the system, in accor-
23 dance with Section 4 paragraph (b);

24 (C) documentation of the willingness of all necessary parties to
25 implement the proposed system;

26 (D) information identifying the make, model, and year of vehi-
27 cles containing mercury switches; a description of the component;
28 the location of these components; and the safe, cost effective, and
29 environmentally sound methods for their removal from vehicles in
30 commerce and end-of-life vehicles.

31 (E) a mercury switch capture rate of at least 90 per cent, consis-
32 tent with the principle that mercury switches shall be recovered
33 unless the part is inaccessible due to significant damage to the
34 vehicle in the area surrounding where the mercury switch is
35 located;

36 (F) a description of the performance measures to be utilized and
37 reported upon by the manufacturer to demonstrate that the system
38 is meeting the capture rate identified in paragraph (E) of this
39 section and other measures of program effectiveness, including,
40 but not limited to, the number of switches collected from both
41 end-of-life and vehicles in commerce, amount of mercury col-
42 lected, the number of vehicles containing mercury switches, and
43 the number of vehicles processed for recycling;

44 (G) a description of additional or alternative actions that shall
45 be implemented to improve the system and its operation in the
46 event that the program targets established under paragraph (E) are
47 not met; and

48 (H) a plan to store the mercury collected and recovered from
49 vehicle components in the event that environmentally appropriate
50 management technologies are not available.

51 (3) Use of Existing Infrastructure for Mercury Switch Replace-
52 ment. In developing a removal, replacement, collection, and
53 recovery system, manufacturers shall, to the extent practicable,
54 utilize existing dealerships, service stations, inspection stations,
55 repair shops, and other facilities which regularly service vehicles
56 in commerce. Where a manufacturer does not utilize such infra-
57 structure, the manufacturer shall include in its plan the reasons for
58 establishing a separate removal, replacement, collection, and
59 recovery infrastructure.

60 (4) Use of Existing End-of-Life Vehicle Infrastructure for Mer-
61 cury Switch Removal. In developing a removal, collection, and
62 recovery system, manufacturers shall, to the extent practicable,
63 utilize the existing end-of-life vehicle recycling infrastructure.
64 Where a manufacturer does not utilize such infrastructure, the
65 manufacturer must include in its plan the reasons for establishing
66 a separate removal, collection, and recovery infrastructure.

67 (b) Cost. The total cost of the removal, replacement, collection,
68 and recovery system for mercury switches shall be borne by the
69 manufacturer or manufacturers. Costs shall include, but not be
70 limited to, the following:

71 (1) labor to remove, or replace where possible, mercury
72 switches. Labor shall be reimbursed at the prevailing rate auto
73 manufacturers use to reimburse automotive dealers for replacing
74 faulty switches under the manufacturer-dealer warranty program;

- 75 (2) training;
- 76 (3) packaging in which to transport mercury switches to recycling, storage or disposal facilities;
- 77 (4) shipping of mercury switches to recycling, storage or disposal facilities;
- 78 (5) recycling, storage or disposal of the mercury switches;
- 79 (6) public education materials and presentations; and
- 80 (7) maintenance of all appropriate systems and procedures to protect the environment from mercury contamination.
- 81 (c) Plan Approval. The Commissioner of the Department shall:
- 82 (1) within 30 days of receipt of a manufacturer's plan, issue public notice and solicit public comment on the manufacturer's plan;
- 83 (2) Within 90 days after receipt of a manufacturer's plan:
- 84 (A) determine whether the entire plan complies with this section. If the entire plan is approved, the manufacturer shall begin implementation as soon as practicable. If the entire plan is rejected, the Commissioner shall inform the manufacturer as to the reasons for such rejection. The manufacturer will have thirty days thereafter to submit a new plan; or
- 85 (B) determine whether any part of the plan meets the requirements of this section and shall approve such part(s) and disapprove such other(s) that do not comply with the requirements of this section. The manufacturer shall immediately implement the approved part(s) and submit a revised plan respecting the remaining parts within thirty days after receipt of notification of the Commissioner's disapproval. The Commissioner shall review a manufacturer's revised plan within thirty days of receipt.
- 86 (3) 240 days after the date of enactment of this Act, complete, on behalf of a manufacturer, any portion of the plan that has not been approved.
- 87 (4) The Commissioner of the Department shall review the plan three years after the original date of approval of the plan and every three years thereafter, and shall require modifications to the plan as appropriate.

1 SECTION 5. PROHIBITION AND PROPER MANAGEMENT
2 OF MERCURY ADDED VEHICLE COMPONENTS.

3 A person who sells, gives or otherwise conveys ownership of
4 an end-of-life vehicle to a scrap recycling facility for recycling

5 shall remove all mercury-added switches from such end-of-life
6 vehicle prior to delivery to such facility.

7 Notwithstanding the foregoing paragraph, a scrap recycling
8 facility may agree to accept an end-of-life vehicle (which has not
9 been intentionally flattened, crushed or baled) with mercury-
10 added switches, in which case the scrap recycling facility shall be
11 responsible for removing such switches.

12 It shall be unlawful for any person to represent that mercury
13 switches have been removed from a vehicle or vehicle hulk being
14 sold, given or otherwise conveyed for recycling if that person has
15 not removed such mercury switches or arranged with another
16 person to remove such switches.

1 SECTION 6. PHASE-OUT OF MERCURY-ADDED VEHICLE
2 COMPONENTS AND EXEMPTIONS.

3 (a) Phaseout of Mercury-Added Components. To prevent emis-
4 sions or other releases of mercury from vehicles, effective two
5 vehicle model years from the date of enactment of this Act, no
6 mercury-added component shall be included as part of a new
7 vehicle offered for sale in Massachusetts.

8 (b) Exemption. — A mercury-added component in a vehicle
9 that is necessary in order to comply with Federal or state health or
10 safety requirements, or for purposes of national security, shall be
11 exempt from the requirements of subsection (a) of this section,
12 provided that:

13 (1) The manufacturer must apply, or reapply, for such exemp-
14 tion to the Commissioner of the Department.

15 (2) The application must be in writing, in a form acceptable to
16 the Commissioner of the Department, stating the need for an
17 exemption and the legal basis for an exemption. It must include
18 documentation that there is no technically feasible alternative to
19 the use of mercury in the component and that there is no compa-
20 rable mercury-free component available at reasonable cost to
21 address the health or safety requirement, or national security. “No
22 technically feasible alternative” does not include the use of mer-
23 cury for the purpose of marketing.

24 (A) The application must include a description of how the man-
25 ufacturer will insure that a system exists, and how the manufac-
26 turer will fund such system, for the proper removal, collection,

27 and recovery of the mercury-added component while the vehicle
28 is in commerce and at the end of the vehicle's useful life.

29 (B) Subject to the issuance of public notice and solicitation of
30 public comment, Department shall, within 90 days, accept or
31 reject the application for exemption.

32 (5) An exemption application may be submitted to Commis-
33 sioner of the Department, subject to public notice and comment,
34 for safety components not required by federal or state law. An
35 exemption may only be granted upon clear demonstration that:

36 (A) Such components will substantially increase public health
37 and safety considering any impacts the components may have on
38 overall public safety on the roads, and the life-cycle impacts of
39 the mercury use, and

40 (B) That there is no technically feasible alternative to the use of
41 mercury in the component.

42 (4) An exemption granted under this section by the Commis-
43 sioner shall be valid for a period not to exceed two years.

44 (5) Exemptions granted under this section shall be renewable
45 for periods not to exceed two years.

46 (6) If granted an exemption, any vehicle that may contain a
47 mercury-added component shall be labeled by the manufacturer in
48 a manner to clearly inform purchasers that mercury is present in
49 the vehicle, and that the component may not be disposed of or
50 placed in a waste stream destined for disposal until the mercury is
51 removed or reused, recovered, or properly disposed of as a haz-
52 ardous waste or otherwise managed to ensure that the mercury
53 does not become mixed with other solid waste. The label shall
54 identify the component with sufficient detail so that it may be
55 readily located for removal. This label shall be placed on the
56 doorpost of each vehicle that may contain a mercury-added com-
57 ponent and be constructed of materials that are sufficiently
58 durable to remain legible for the useful life of the vehicle.

59 (c) Design for Recycling. — Manufacturers, when designing
60 vehicles and their components, shall:

61 (1) to the maximum extent practicable eliminate hazardous sub-
62 stances from their vehicles;

63 (2) insure that their vehicles are designed to be recycled in a
64 safe, cost effective, and environmentally sound manner, using
65 existing technologies and infrastructures;

66 (3) Where a vehicle is found to present environmental risks that
67 make it uneconomical to recycle, the manufacturer shall make
68 appropriate design or manufacturing changes.

1 SECTION 7. GENERAL COMPLIANCE WITH OTHER
2 PROVISIONS.

3 Except as expressly provided in this Act, compliance with this
4 Act shall not exempt a person from compliance with any
5 other law.

1 SECTION 8. REGULATIONS.

2 The Commissioner of the Department may promulgate regula-
3 tions concerning this Act.

1 SECTION 9. PUBLIC NOTIFICATION AND COMMENT.

2 The Department shall issue public notice and solicit public
3 comment on (1) the removal, replacement, collection, and
4 recovery plans submitted by the vehicle manufacturer(s) sub-
5 mitted pursuant to Section 4 of this Act, and (2) the
6 applications/reapplications for exemptions from the phase-out
7 provisions of Section 6 of this Act. Such notification and solicita-
8 tion shall be issued within 30 days of receiving a plan/application
9 from the manufacturer(s), giving the public adequate time to com-
10 ment on the proposals.

11 Public comments received within the 90-day review period of
12 these provisions shall be considered by the Department when
13 making its decision to accept or reject either the plan or the appli-
14 cation for exemption.

1 SECTION 10. REPORTING.

2 One year after the implementation of the removal, replacement,
3 collection, and recovery system, and annually thereafter, a manu-
4 facturer subject to Section 4 of this Act shall report to the Depart-
5 ment concerning the performance of the manufacturer's plan. The
6 report shall include, but not be limited to, the following:

7 (a) a detailed description and documentation of the capture rate
8 achieved;

9 (b) a plan to implement additional or alternative actions, if nec-
10 essary to improve the capture rate;

11 (c) a listing of the public educational initiatives implemented,
12 including size of audience reached; and

13 (d) any changes in the participation of the necessary parties for
14 the plan to be effectively implemented.

1 SECTION 11. CIVIL ENFORCEMENT.

2 Comport to state or federal law.

1 SECTION 12. CRIMINAL ENFORCEMENT.

2 Comport to state or federal law.

1 SECTION 13. UNIVERSAL WASTE.

2 The Department shall modify its rules governing universal haz-
3 ardous waste as appropriate to promote the collection, transport,
4 recovery, and proper management of mercury-added vehicle
5 components.

1 SECTION 14. PUBLIC EDUCATION AND OUTREACH.

2 (a) Automobile manufacturers shall implement a comprehen-
3 sive education and outreach program for the general public and
4 the parties willingly participating in the removal, replacement
5 where appropriate, recovery and disposal system established
6 under this Act. This education and outreach program should focus
7 on the hazards related to, and the proper handling of, mercury; the
8 requirements and obligations of individuals, manufacturers, and
9 agencies under this Act; and the details of the system established
10 under this Act.

11 (b) In collaboration with automobile manufacturers, the Depart-
12 ment shall supplement this education and outreach program with
13 an assistance program for businesses that might participate in the
14 collection, replacement where appropriate, recovery and disposal
15 system established under this Act.

16 (c) Willingly participating parties shall implement a public edu-
17 cation and outreach program focused on their participation in the
18 collection, replacement (where applicable), recovery and disposal
19 system established under this Act.

1 SECTION 15. GOVERNMENT PROCUREMENT.

2 Notwithstanding other policies and guidelines for the procure-
3 ment of vehicles, the Operations Services Division shall, within 1
4 year of the effective date of this section, revise its policies, rules
5 and procedures to give priority and preference to the purchase of
6 mercury-free vehicles taking into consideration competition,
7 price, availability and performance.